Before the
FEDERAL COMMUNICATIONS COMMISSION FCC 95-230
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Parts 21 and 74 of the	)	
Commission's Rules With Regard to	)	MM Docket No. 94-131
Filing Procedures in the Multipoint	)	
Distribution Service and in the	)	
Instructional Television Fixed Service	)	
	)	
and	)	
	)	
Implementation of Section 309(j) of the	)	PP Docket No. 93-253
Communications Act - Competitive Bidding	)	

REPORT AND ORDER

Adopted: June 15, 1995; Released: June 30, 1995

By the Commission: Chairman Hundt dissenting in part and issuing a statement; Commissioners Quello and Barrett issuing separate statements; and Commission Ness dissenting in part and issuing a statement.

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I. INTRODUCTION AND SUMMARY

1. By this action, we adopt rules to facilitate the development and rapid deployment of wireless cable services.[1] As a result of our actions in prior proceedings, wireless cable operators that use spectrum in the Multipoint Distribution Service (MDS), often

[1] Wireless cable programming to subscribers resembles cable television, but instead of coaxial cable, wireless cable uses microwave channels. Our use of the term "wireless cable" does not imply that it constitutes cable television for statutory or regulatory purposes.

supplemented with leased channels from the Instructional Television Fixed Service (ITFS), have begun to provide a competitive alternative to wired cable and other multichannel video programming distributors.[2] The rules we now adopt will accelerate that process by setting streamlined measures to distribute unused MDS spectrum through competitive bidding and by establishing a protected service area for MDS stations that is large enough to allow operators flexibility they need to design viable and competitive wireless cable systems. Adoption of these rules will enable the Commission to lift the current freeze on filing new MDS applications.[3]

2. Specifically, we adopt in this order a licensing plan under which we will allot, through a simultaneous multiple round bidding process, one MDS authorization for each of the 487 Basic Trading Areas (BTAs) and six additional BTA-like geographic areas.[4] A BTA authorization holder will be able to construct facilities to provide wireless cable service over any usable MDS channels within the BTA, and will have preferred rights to the available ITFS frequencies and ITFS lease agreements within the BTA. A channel is usable if the proposed station design is in compliance with the Commission's interference standards.

3. Under the new rules, the signals of a BTA authorization holder cannot interfere with those of any other BTA authorization holder. Recognizing, however, that BTA lines do not always track desired service areas, the rules permit BTA authorization holders to negotiate interference protection rights. In addition, the rules we adopt require BTA authorization holders to honor the protected service areas of incumbent MDS operators within their BTAs. In a companion order, also adopted today, the Commission expanded the protected service areas of existing MDS stations.[5] These various licensees and applicants that are authorized or proposed on or before June 15, 1995, including those stations that are subsequently modified, renewed or reinstated, are referred to throughout this *Report and Order* as "authorized or previously proposed facilities" or "incumbents." In order to facilitate the development of successful wireless cable systems, the rules permit BTA authorization holders to assign or transfer their entire BTAs, or partitioned portions of it, to incumbents or other parties. (Unserved areas may be included as long as the assignment or

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[2] Unless otherwise indicated, "MDS" includes single channel Multipoint Distribution Service (MDS) and Multichannel Multipoint Distribution Service (MMDS) applications and authorizations collectively.

[3] The Commission imposed a freeze on the filing of applications for new MDS stations in *Notice of Proposed Rulemaking* in PR Docket No. 92-80, 7 FCC Rcd 3266 (1992).

[4] Rand McNally defined 487 BTAs in the *1992 Commercial Atlas & Marketing Guide.* Since Rand McNally did not include a few areas, we will add them to the list as BTA-like geographic areas, bringing the total to 493 authorizations to be auctioned. *See infra* at ¶ 37.

[5] *Second Order on Reconsideration* in Gen. Docket Nos. 90-54 and 80-113, FCC 95-231 (released June 21, 1995) (*Second Order on Reconsideration*).

transfer takes place within the five-year build-out period that the rules impose.) Because the BTA authorization holder may be an incumbent, the rules permit the aggregation of existing and new MDS and ITFS channels within a BTA.

4. The *Report and Order* also adopts a variety of measures to streamline the application and implementation processes. It authorizes, for example, the voluntary use of electronic filing for new MDS applications, as well as electronic fee payments. It institutes computerized interference studies utilizing new data elements to be included in a revised MDS application form. It also makes clear that interference disputes are to be resolved, in the first instance, through private negotiations, with the Commission to serve only as a last resort.

5. We understand that the wireless cable industry has made tremendous progress toward the transition to digital transmission.[6] The rules we adopt today will facilitate that transition.

II. BACKGROUND

6. The origin of MDS dates back to 1970, when the Commission removed a limitation on the authorized bandwidth for licensees utilizing the 2150-2160 megahertz (MHz) frequency band.[7] This action led to numerous applications which proposed to use this spectrum for the distribution of television programming from a central location to subscribers at many points. The Commission subsequently determined that the point-to-point service rules were not appropriate for a service that had become a point-to-multipoint service and in 1974, adopted rules to establish the Multipoint Distribution Service.[8] These rules provided for two MDS channels, each consisting of 6 MHz, in the 50 largest metropolitan areas. In the rest of the country, though one 6 MHz channel is available, the second channel bandwidth is 4 MHz and it cannot be used to transmit a standard television signal, which requires 6 MHz of spectrum. In 1983, to satisfy a growing demand for the delivery of video entertainment programming to subscribers and to provide competition to wired cable systems, the Commission reallocated eight of the then twenty-eight ITFS channels for MDS use, and authorized ITFS licensees to lease the excess capacity on their systems to wireless cable

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[6] *See, e.g.,* The Wireless Cable Association International, Selected Papers from the First Annual Wireless Cable Technical Symposium (February 4-6, 1995).

[7] *Memorandum Opinion and Order, In the Matter of Part 21, Section 21.703(g) and (h) of the Commission's Rules,* 47 FCC 2d 957 (1970).

[8] *Report and Order, Amendment of Parts 1, 2, 21 and 43 of the Commission's Rules to Provide for Licensing and Regulation of Common Carrier Radio Stations in the Multipoint Distribution Service,* 45 FCC 2d 616 (1974), *recon. denied,* 57 FCC 2d 301 (1975).

operators.[9] That action created wireless cable as a multichannel video distribution medium, and in 1991, the Commission made more channels available for wireless cable services.[10] Today, there are a maximum of thirty-three microwave channels used for wireless cable in each market. These include thirteen MDS channels (Channels 1, 2 or 2A, E1-E4, F1-F4 and H1-H3) and the excess capacity on up to twenty ITFS channels (Channels A1-A4, B1-B4, C1-C4, D1-D4 and G1-G4).[11]

7. Wireless cable is now similar to wired cable television in the type of programming it provides, but differs from cable in how the programming is transmitted to subscribers. Generally, a wireless cable system may be described as a microwave station transmitting on a combination of MDS and ITFS channels to numerous receivers with antennas, such as single family residences, apartment complexes, hotels, educational institutions, business entities and governmental offices. The range of the transmission depends upon the transmitter power, the type of receiving antenna and the existence of a line-of-sight path between the transmitter or signal booster and the receiving antenna.

8. Over the past few years, the wireless cable industry has experienced substantial growth and has emerged as an effective competitor to wired cable in many locations.[12] This rapid growth is due, in part, to program access provisions and changes in other regulations

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[9] *Report and Order* in Gen. Docket No. 80-112 and CC Docket No. 80-116, 94 FCC 2d 1203 (1983). Therein, the Commission also grandfathered interference protection to existing ITFS applicants, permittees or licensees on these eight E and F channels, resulting in twenty-eight ITFS channels in some locales.

[10] The Commission reallocated the H group channels from the Operational Fixed Service to MDS and made MDS operators eligible for authorization on vacant ITFS channels with specified restrictions. *Second Report and Order* in Gen. Docket No. 90-54, 6 FCC Rcd 6792, 6793-94, 6801-06 (1991), *recon. denied*, 7 FCC Rcd 5648 (1992). Last year, the Commission consolidated processing of MDS and ITFS applications into one organization. *Amendment of Parts 0 and 1 of the Communication's Rules to Reflect a Reorganization of Multipoint and Multichannel Multipoint Distribution Services*, 9 FCC Rcd 3661 (1994).

[11] MDS channel 2A is only 4 MHz wide and lacks sufficient bandwidth to transmit a standard television signal. Grandfathered ITFS stations on the eight E and F channels also lease excess capacity to wireless cable operators.

[12] *See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, 9 FCC Rcd 7442, 7482-88 (1994). The Commission is required to file such reports pursuant to the Cable Television Consumer Protection and Competition Act of 1992, Pub. L. No. 102-385, § 628(g), 106 Stat. 1460 (amending the Communications Act of 1934), codified at 47 U.S.C. § 548(g). The Commission recently adopted a *Notice of Inquiry* to obtain information needed to prepare the annual assessment that will be released in 1995, FCC 95-186 (released May 24, 1995), 60 Fed. Reg. 29,533 (June 5, 1995).

that have increased access to financing. According to the Wireless Cable Association International, Inc. (Association), "[t]he rapid growth of the wireless cable industry has been fueled by recent debt and equity financing that almost certainly would not have been made but for investor confidence engendered by the FCC's nurturing of wireless cable."[13] Moreover, the growth of MDS has led to the continued development of ITFS. Indeed, wireless cable operators significantly serve the public interest by supporting and funding approximately 95 percent of all new ITFS applicants. This includes many small, rural school systems who now have, or will soon have, access to quality educational materials, which historically have been available only to more affluent school systems. In addition to its contributions to ITFS, wireless cable operators offer other public interest benefits which include expanding consumer choice, stimulating economic growth and providing competition to other multichannel video programming distributors, resulting in better service to the public at lower prices. Today, the Association estimates that there are 170 wireless cable systems in operation which serve approximately 700,000 homes, and experts predict that wireless cable will at least double its current subscriber base by the end of 1995. Comments of Association at 6-7.

9. MDS is a heavily encumbered service. Most of the thirteen MDS channels have already been authorized in the largest metropolitan areas, especially for locations in the eastern half of the country. Thus far, MDS has developed almost entirely in large and medium-sized cities, though MDS systems also serve many smaller communities in the western states. In addition to the approximately 170 operating wireless cable systems, many conditional licenses have been issued to entities that, presumably, are in various stages of constructing their systems. Finally, the MDS landscape includes MDS systems proposed in applications now being processed at the Commission.

10. On December 1, 1994, the Commission released a *Notice of Proposed Rulemaking* in this proceeding which solicited comment on proposals that would modify our MDS filing procedures and use competitive bidding to select from among mutually exclusive applicants. *Notice of Proposed Rulemaking* in MM Docket No. 94-131 and PP Docket No. 93-253, 9 FCC Rcd 7665 (1994) (*Notice*). In the *Notice*, the Commission acknowledged that wireless cable operators must have access to as many available channels as possible in order to meet subscriber demand and compete with wired cable television systems in the same area. We further observed in the *Notice* that the expansion of the wireless cable industry has been stifled by an MDS licensing process that has been bogged down for a number of years by thousands of applications and legal protests. The majority of the applications were believed to be speculative and many of the protests were believed to be frivolous. *Notice* at 7668-69. In 1990, the Commission adopted a one-day cut-off period, which is referred to as the "same calendar day rule," in an attempt to limit the opportunity for speculators to simply

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[13] Comments of Association at 6. The Association members include the operators of virtually all wireless cable systems in the United States, as well as licensees in MDS and ITFS, equipment manufacturers and program suppliers.

copy applications that were previously filed and resubmit them under different names.[14] Nevertheless, speculators continued to file a large number of applications up to the time the Commission imposed the freeze on filing applications for new MDS stations in 1992.[15] The backlog has been significantly reduced since the freeze was imposed, and the staff is continuing its efforts to eliminate the remaining backlog of pending applications, process other applications filed after the freeze, such as modifications, and update the MDS inventory.[16] The proposals set forth for consideration in this proceeding were designed to avoid the future accumulation of backlogged applications and legal protests that have delayed the deployment of MDS stations in the past.

11. In the *Notice*, we proposed to modify our application filing procedures and use competitive bidding to select from among mutually exclusive applicants. We also proposed to implement a mandatory electronic filing system for new MDS and ITFS applications.[17] As a complement to the electronic procedures, the *Notice* proposed that the Commission utilize computerized interference studies, revise the current application forms, permit the electronic filing of fee payments and establish a current data base with on-line viewing access to the public. Finally, the *Notice* solicited any other proposals that would allow the Commission to process applications for new MDS stations more efficiently. We received twenty-two comments and nineteen replies from commenters who include MDS licensees, wireless cable operators, attorneys, consulting engineers, educational institutions and other entities who are

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[14] 47 C.F.R. § 21.914. *Report and Order* in Gen. Docket Nos. 90-54 and 80-113, 5 FCC Rcd 6410, 6424 (1990); *Order on Reconsideration*, 6 FCC Rcd 6764 (1991), *petition for review filed, United States Independent Microwave Television Association v. FCC and United States of America*, No. 91-1637 (D.C. Cir. filed Dec. 20, 1991) (held in abeyance by Court Order of February 21, 1992, pending action on second set of reconsideration petitions); *Second Order on Reconsideration*, FCC 95-231 (released June 21, 1995).

[15] *Supra* at n.3. In January of 1993, the Commission adopted a number of rule changes designed to deter abuse by speculators. *Report and Order* in PR Docket No. 92-80, 8 FCC Rcd 1444 (1993).

[16] *See, e.g., 101 Applications for Authority to Construct and Operate Multipoint Distribution Service Stations*, 9 FCC Rcd 7886 (1994); *4,330 Applications for Authority to Construct and Operate Multipoint Distribution Service Stations at 62 Transmitter Sites*, 10 FCC Rcd 1335 (1994), *joint notice of appeal filed, A/B Financial, Inc., et al. v. FCC*, 95-1027 (D.C. Cir. filed Jan. 9, 1995). In several orders adopted today, we uphold the return of an additional 731 MDS applications as unacceptable for filing.

[17] The only aspect of the *Notice* which applied to ITFS was the electronic filing proposal. In a separate proceeding, the Commission recently adopted improvements to the ITFS licensing process, including a window filing procedure. *Report and Order, Amendment of Part 74 of the Commission's Rules With Regard to the Instructional Television Fixed Service,* MM Docket No. 93-24, 10 FCC Rcd 2907 (1995).

interested in MDS.[18] While the commenters generally support the Commission's efforts to streamline its processing procedures and expedite development of wireless cable services, they have varying proposals on how to accomplish these goals.

III. DISCUSSION

A. FILING PROCEDURES AND SERVICE RULES

12. ***Proposals.*** In the *Notice*, the Commission proposed that applicants file short-form applications for established geographic service areas to identify mutually exclusive applicants for competitive bidding purposes and that the successful bidders file long-form applications. *Notice* at 7669-71. The *Notice* suggested the use of predetermined geographic areas, such as Metropolitan Statistical Areas (MSA) and Rural Service Areas (RSA) or Areas of Dominant Influence (ADI).[19] This proposal envisioned that we would release a public notice announcing auctions by geographic area, specifying the filing period for short-form applications (FCC Form 175)[20] and the applicable bidding procedures. Mutually exclusive applicants would bid for all usable MDS channels in that area as a package and the auction winner would be permitted to file long-form applications for conditional licenses to operate stations anywhere throughout the service area provided the specific engineering design of their MDS stations meets the Commission's interference protection standards with respect to all authorized or previously proposed MDS and ITFS facilities. Long-form applications accepted for filing would be proposed for grant by a Commission public notice, announcing that the applications are accepted for filing and opening a thirty-day period for filing petitions to deny. *See* 47 U.S.C. § 309(b); 47 C.F.R. § 21.30. The *Notice* observed that these filing procedures would enable operators to amass MDS channels, would avoid the lengthy delay

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[18] A list of the parties filing comments and replies is provided in Appendix A. The list includes parties who, in response to a July 28, 1993 *Public Notice*, filed comments on ways the Commission could expedite the processing of MDS applications. We have considered those views and incorporated those materials in the public record of this proceeding.

[19] MSAs and RSAs are standard geographic areas used by the Commission for administrative convenience in licensing cellular radio systems. The Commission has also used MSAs since 1983 for making mutually exclusive determinations for MDS applications filed for the E or F channels under 47 C.F.R. § 21.901(d)(5). ADIs are standard geographic areas that were developed by Arbitron Ratings Company. Each county in the United States is placed within one of 209 ADIs, the lowest numbered ADI having the highest population.

[20] FCC Form 175 contains the applicant's name, the markets in which the applicant wishes to bid, the persons authorized to make or withdraw a bid, whether the applicant is qualified as a designated entity under 47 C.F.R. § 1.2110, certifications that the applicant is legally, technically, financially and otherwise qualified, and identification of all parties involved in agreements, or certification that no agreements exist, relating to the authorizations being auctioned or the bidding process.

associated with licensing stations site-by-site and therefore would allow operators to enhance their services more rapidly. The *Notice* asked commenters to determine which type of geographic areas would be most suitable for MDS and to address the definition of protected service area. In particular, we requested comment on whether the current definition of an MDS station's protected service area would be appropriate,[21] or whether the boundary of the geographic area designed for auction purposes should become the protected service area. We also asked commenters to discuss the interference standards for service to the areas adjacent to the boundaries between geographic areas. Although the *Notice* identified this approach of licensing MDS channels as the preferred approach, we also invited comment on alternative licensing procedures.

13. The *Notice* suggested an alternative approach that would limit applications to predetermined sites where there are vacant E, F or H channels. *Notice* at 7671-72. Under this approach, the Commission would identify such sites based upon the location of an already authorized E, F or H channel. The Commission would issue multiple public notices specifying the filing period and applicants would file a short-form application to identify mutually exclusive situations for purposes of competitive bidding. The auction winner would be required to file a long-form application containing a complete engineering proposal and specifying a compatible station design with the Commission's interference protection standards to all previously proposed or authorized MDS and ITFS facilities.

14. Under another alternative presented in the *Notice,* the Commission would periodically open national filing windows, with no geographic restrictions on filing for available MDS channels. *Notice* at 7672-73. Pursuant to this proposal, we would release a public notice announcing the filing window for available channels. This proposal would initially require a long-form application, containing the applicant's complete technical proposal, to determine mutual exclusivity before competitive bidding procedures are implemented. The *Notice* pointed out that this approach would likely result in a larger number of mutually exclusive applications and increase the possibility of "daisy-chains" (interlinking application proposals at different locations), which would require a more complicated and time consuming competitive bidding process, including subsequent rounds of auctions to resolve all mutual exclusivities in a daisy-chain. We invited commenters favoring a national window approach to recommend ways to resolve the daisy-chains that might arise under this proposal.

15. As an option to the national filing window approach, the *Notice* discussed limiting eligibility to file in the first window to existing licensees and system operators who, at the time the application is filed, are operating with a certain minimum number of channels. *Notice* at 7673. In many situations, the acquisition of a small number of

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[21] 47 C.F.R. § 21.902. In another order, also adopted today, the Commission amends 47 C.F.R. § 21.902, to expand the protected service area for authorized or previously proposed MDS facilities. *Second Order on Reconsideration* at ¶¶ 2-31.

additional channels may be essential for launching a whole new wireless cable system in a given area. This approach would allow existing wireless cable operators to accumulate the critical mass of channels necessary to operate competitive wireless cable systems. We asked commenters favoring this option to suggest eligibility requirements to govern the filing of applications in this first window.

16. ***Comments.*** There is no consensus in the comments as to which filing approach we should adopt for new MDS stations. The majority of the commenting parties express support for the national filing window approach. Of these, most favor a first window limited to existing licensees and operators, and some commenters advocate such a preference regardless of the filing approach. A few of the commenters support the *Notice's* preferred approach of filing applications for predetermined geographic areas; however, they disagree as to the appropriate type and size of service areas. The commenters who discussed the approach that would restrict applications to Commission-identified sites where there are vacant E, F or H channels available generally oppose that concept. Others suggest additional options, such as an MDS allotment plan, or variations of the alternatives proposed in the *Notice*, such as a national filing window coupled with short-form applications or a first window limited to existing operators with subsequent windows for remaining MDS channels licensed by MSAs and RSAs. Several parties provided additional suggestions for filing procedures, not discussed in the *Notice*.

17. Crowell & Moring, Pacific Telesis Enhanced Services (PacTel), the Rural Wireless Cable Coalition (Rural Wireless) and CAI Wireless Systems, Inc. (CAI Wireless) favor the *Notice's* preferred filing approach where the boundary of the geographic area becomes the protected service area.[22] They agree with the *Notice* that an approach based upon predetermined geographic areas provides the most efficient system for disseminating MDS licenses. In particular, Crowell & Moring prefers this approach over site-by-site licensing because geographic licensing is easier to administer, it achieves the most efficient use of the spectrum, it eliminates daisy-chains (interlinking application proposals at different locations), and it avoids burdensome litigation. Crowell & Moring believes that failure to adopt a geographic area licensing approach would leave MDS at a serious competitive disadvantage compared with Local Multipoint Distribution Service (LMDS) which proposes to license by BTAs and Interactive Video and Data Service (IVDS) which licenses by MSAs and RSAs. PacTel maintains that the licenses would be awarded to those who value them most, and the auction winner would be more likely to be a viable competitor to wired cable. Crowell & Moring and PacTel prefer using ADIs as the basis for MDS service areas because ADIs are of sufficient size to allow a large subscriber base, improving the value of

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[22] *See* Comments of Crowell & Moring at 2-10; PacTel at 2-3; CAI Wireless at 4-6; Rural Wireless at 9-10; Reply Comments of Crowell & Moring at 2-12; CAI Wireless at 8-12; Rural Wireless at 6-9. Rural Wireless includes Central Texas Wireless TV, Inc., Adams Telcom, Inc., Leaco Rural Telephone Cooperative, Inc., Delhi Telephone Company and Valley Telephone Cooperative, Inc.

advertising and allowing more effective competition with wired cable, and because there are more usable channels than available in MSAs and RSAs, ADI auctions would attract more bidders. Rural Wireless believes that MSAs would be attractive to larger companies and RSAs would be more affordable to small operators, such as rural telephone companies, encouraging participation by a variety of service providers. Rural Wireless recommends that the auction winner have the option to partition unused portions of the service area. Partitioning, according to Rural Wireless, would give rural telephone companies a meaningful opportunity to acquire MDS licenses, thereby introducing or improving wireless cable to rural areas, many of which have no other source of multichannel video programming. CAI Wireless supports using MSAs and RSAs for licensing only after a first window for existing operators and recommends that the protected service areas be made coterminous with the boundaries of the MSAs and RSAs only after digital compression technologies are introduced.[23] Finally, Crowell & Moring requests that the Commission modify its rules to allow the licensee of a geographic area to apply for unused ITFS frequencies anywhere within the protected service area.

18. Numerous commenters oppose geographic licensing where the protected service areas of the MDS stations are coterminous with the boundaries of the geographic areas. Essentially, they present five interrelated arguments in opposition to this approach. First, many commenters assert that such an approach places limits on an operator's flexibility to design a system. For example, American Telecasting, Inc. (American Telecasting) explains that wireless cable operators select their locations based on where they already have systems, the absence of cable service, the presence of poor cable service or other business reasons inconsistent with political boundaries. Comments of American Telecasting at 17. Second, a few commenters assert that the MDS analog technology, unlike cellular technology, does not permit a wireless cable system to provide service throughout a designated area without significant leakage into adjacent service areas. According to the Association, if a system is designed to maximize coverage of a given geographic area, it will leak significant signal levels into a neighboring area, and if a system reduces its signal to prevent leakage, the operator loses its flexibility to maximize population coverage. Comments of Association at 39-40. The Association points out that while it may be possible to design a wireless cable system without leakage into adjacent areas after conversion to digital technology, the most optimistic estimate for availability of digital compression equipment in quantity is the first quarter of 1996. Comments of Association at 3-4. Third, several commenters emphasize that the sizes of some areas are inappropriate for the MDS service and may cause delays in the introduction of service in many markets. For example, American Telecasting asserts that

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[23] Digital compression is a technology that employs various techniques to reduce the number of bits required to transmit a program. For a given channel bandwidth and digital transmission rate, an operator may, depending on circumstances, transmit a single uncompressed program or multiple compressed programs. For example, a six-to-one compression ratio permits the operator to offer six program channels over one 6 MHz channel that would accommodate only one uncompressed program.

area boundaries have nothing to do with wireless cable service areas, that ADIs tend to be much larger than wireless cable service areas, that MSAs can be larger or smaller than wireless cable service areas and that BTAs are an equally poor methodology. Comments of American Telecasting at 18. The Richard L. Vega Group (Vega) indicates that the irregular market boundaries of MSAs, RSAs, BTAs, MTAs and ADIs are unfit for MDS. Comments of Vega at 2-4. The Association asserts that if the Commission utilizes large geographic areas, such as ADIs, it must afford an opportunity for entities to enter into bidding consortia and partition the ADI among themselves. The Association further asserts that if channels are auctioned by geographic areas, the use of simultaneous multiple round bidding would allow applicants to bid for adjacent markets and design systems to maximize population coverage beyond boundaries. Comments of Association at 34-37. Fourth, several commenters believe that area-based licensing is inconsistent with the licensing of ITFS facilities.[24] Specifically, some contend that the protected service area for MDS and ITFS should be coterminous to ensure adequate protection for all of a wireless cable operator's channels. Other parties argue that a licensing system based on geographic areas would result in newly authorized systems that are different and most likely incompatible with previously authorized MDS facilities, making it difficult for incumbent operators to add channels to their systems. The Association is concerned about the level of protection incumbent licensees will have and their flexibility to upgrade their facilities in the future. Finally, many commenters believe that a licensing system based on geographic areas will attract speculative applications because of the simplicity of the short-form and because it is easier for unscrupulous marketers to sell an already defined market area. For example, Hardin and Associates, Inc. (Hardin) is concerned that applicants may be deceived into bidding on an area that appears to be profitable, only to discover after the auction that the area is worthless because of the harmful interference from existing stations. Comments of Hardin at 5.

19. Two commenters support the approach which would require the Commission to identify sites based upon the location of an already authorized E, F or H channel, but only as a second option. *See* Comments of Hardin at 7; Association at 45-47. For example, Hardin contends that this approach, when compared to the geographic licensing approach, is more likely to result in constructed stations that coexist with surrounding stations in an environment free of interference. Hardin and the Association, however, along with the many opponents of this approach, identify several problems with such an approach.[25] They contend that it limits the operator's flexibility to design a system, it falsely assumes that the

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[24] *See* Comments of Association at 41; Caritas Telecommunications (Caritas) at 2; Reply Comments of Humanities Instructional Television Educational Center, Inc. (Humanities) at 1; University of Arizona at 1; People's Choice TV Corp. at 2; Region IV Education Service Center (Region IV) at 1; University of Maryland at 1; American Telecasting at 20; National ITFS Association (National ITFS) at 3-4.

[25] *Id.; See also* Comments of CAI Wireless at 7-8; Dalager Engineering Company (Dalager) at 2; Marshall Communications, Inc. (Marshall) at 5; Vega at 6.

previously authorized E, F and H channels are going to be constructed where previously proposed, and it would require the Commission to make subjective choices between sites.

20. The commenting parties who support adoption of the national filing window approach assert similar arguments.[26] The Association, for example, states that the national filing window approach is best because it allows licensees to continue to self-select their protected service area through station location and design, and implementation of an electronic filing system will eliminate much of the delay associated with site-specific licensing. Marshall believes that a national window would result in better coverage for populated areas while minimizing harmful interference, as topography and demographics are considered when choosing a station location. Heartland believes that implementation of this approach would be much less disruptive to the wireless cable industry, stating that although it is a slower process, a whole new complicated licensing process would take longer. Hardin believes that a national filing window would generate applicants that are genuinely interested because a detailed engineering analysis is required prior to submitting a long-form application for competitive bidding. Dalager and ACS Enterprises, *et al.*, suggest that daisy-chains be resolved by multi-part auctions, determining the auction winner and dismissing any mutually exclusive applications and repeating the process with the remaining applicants. Opponents contend that the national window site-by-site licensing approach is administratively complex, increases the possibility of daisy-chains, encourages litigation and thus, would delay the development of new and improved wireless cable service. For example, Rural Wireless states that because this approach has no geographic restrictions, the Commission would be forced to expend an inordinate amount of resources to resolve daisy-chains and determine which mutually exclusive applicants should be placed in the same auction.

21. Of the commenters advocating adoption of the national filing window, a majority favor first window eligibility limited to existing MDS licensees and system operators, with several variations on the specific eligibility requirements. For example, the Association believes that the eligibility restriction should be based upon the number of channels necessary to succeed. Comments of Association at 25-33. Of those parties supporting the geographic licensing approach, three favor a similar preference as part of their licensing scheme. Most

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[26] *See, e.g.*, Comments of American Telecasting at 12-17; Dalager at 2; Hardin at 7-9; Heartland Wireless Communications, Inc. (Heartland) at 5-6; Marshall at 5-6; Mitchell Communications Corp. (Mitchell) at 2; National ITFS at 3-4; Vega at 7-9; Sioux Valley Rural Television, Inc. at 1-2; United States Wireless Cable, Inc. (U.S. Wireless) at 4; Vermont Wireless Cooperative (Vermont Wireless) at 1; Association at 41-44; ACS Enterprises, Inc., Baton Rouge Wireless Cable Television, CableMaxx, Inc., Multimedia Development Corp., Rapid Choice TV, Inc., Reading Wireless Cable General Partnership, Shreveport Wireless Cable Television Partnership, Superchannels of Las Vegas, Inc., Wireless Holdings, Inc. and XYZ Microwave Systems, Inc. (ACS Enterprises, *et al.*) at 5-13; Reply Comments of Association at 19-23; Cross Country Wireless, Inc. (Cross Country) at 3; Multi-Micro, Inc. (Multi-Micro) at 2; Applied Video Technologies, Inc. at 2-3.

of the parties advocating first window eligibility are either MDS licensees or wireless cable operators. The Association and CAI Wireless believe that this approach will permit the Commission to devote scarce processing resources to those in the best position to immediately introduce competition into the marketplace. CAI Wireless emphasizes that limiting eligibility will deter speculative, fraudulent and anticompetitive applicants. Heartland, Vermont Wireless and Multi-Micro assert that existing operators have made substantial investments in the wireless cable industry, they built on the expectation of eventually acquiring additional channels and they deserve an opportunity to complete their systems to effectively compete with wired cable. American Telecasting argues that this type of preference would satisfy the Commission's goal to allow operators to enhance their service more rapidly and thus, accelerate competition to cable. In opposition, Dalager argues that such a preference is unfair to ineligible individuals who have waited patiently for the Commission to lift the freeze, and it is unnecessary because the channels in a specific area are worth more to the local operator than anyone else and the marketplace will place a value on them at auction. PacTel agrees that licenses should be awarded to those who value them most and giving licensees and operators a preference creates the potential for unjust enrichment due to the relatively small number of potential bidders. Vega argues that an initial window for incumbents discriminates against new entrants to the MDS industry.

22. A few of the commenting parties express their support for different filing proposals that were not raised in the *Notice*. du Treil, Lundin & Rackley, Inc. (du Treil) proposes that the Commission develop a comprehensive allotment plan for specific communities across the entire country, with a 50-mile separation and competitive bidding by market. Comments of du Treil at 1-4. Vega and ACS Enterprises, *et al.* propose a national filing window approach with short-form applications. Vega's proposal would use a 50-mile separation to identify mutually exclusive applications for competitive bidding purposes and would only require a certification on the short-form application indicating that the necessary interference studies were conducted and ACS Enterprises, *et al.*, would require technical information on its recommended short-form application, including the specific channels, proposed site coordinates, antenna height, polarization and power. Comments of Vega at 7-9; ACS Enterprises, *et al.* at 12-13. CAI Wireless proposes a first window limited to existing operators followed by windows for the remaining MDS channels licensed by MSA and RSA, permitting auction winners to file long-form applications to operate facilities anywhere in the service area and mutually exclusive applicants in the boundary areas that are unable to negotiate interference rights would participate in a second auction restricted to the channels in the boundary areas. Comments of CAI Wireless at 2-6.

23. Several commenting parties set forth other proposals to enhance processing efficiencies or otherwise improve service to the public. For instance, the definition for protected service area is an issue of vital importance to the industry and several of the commenters indicate that the current interference protection rule which protects an area within 15 miles of a transmitter site or more generally, 710 square miles, fails to adequately

protect existing service from MDS stations. *See* 47 C.F.R. § 21.902(d).[27] Some commenters also believe that an expanded protected service area would deter speculators. They specifically recommend adoption of an approach based on the service capabilities of each station, as proposed by the Association in its Petition for Partial Reconsideration in Gen. Docket No. 90-54 and reiterated in its Comments in this proceeding.[28] Other parties argue that the MDS and ITFS protected areas should be identical and a few others contend that there should be no change in the rule. U.S. Wireless believes that automatic forfeiture of a license under 47 C.F.R. § 21.44 should be eliminated because it subjects MDS conditional licensees and lessees to undue hardship. Reply Comments of U.S. Wireless at 3-4. Several parties urge the Commission to eliminate the application backlog and improve the accuracy of the data base before accepting any new applications, and others recommend additional safeguards against abuse of the Commission's processes including ways to deter speculators and prevent the warehousing of channels, such as the proposal by U.S. Wireless to adopt a finder's preference for reporting unconstructed channels.

24. ***Resolution:*** After careful consideration of the merits of the various proposals we raised in the *Notice*, we continue to prefer a filing approach where applicants file short-form applications and auction winners file long-form applications. We have decided that BTAs are the most appropriate geographic area for MDS. The boundaries of each geographic area, with the exceptions of channels obtained through leases with ITFS licensees, will become the protected service area for the auction winner. The auction winners will be issued authorizations for specific geographic areas and will be permitted to operate one or more MDS transmitting stations and signal boosters anywhere inside the service area, provided the specific engineering design meets the Commission's interference protection standards to all authorized or previously proposed MDS and ITFS facilities, and complies with the limits we establish for signal strength along the perimeter of the geographic area. *See infra* at ¶¶ 50-53. Following the auction, there would be a five year build-out period in which an authorization holder can expand service or initiate new service within their area without competing applications. The authorization holder will also be permitted to partition its area along established geopolitical boundaries and enter into contracts with eligible parties, allowing such parties to file long-form applications for usable MDS channels within that

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[27] This issue is being addressed in a separate order adopted by the Commission today. *Second Order on Reconsideration*, at ¶¶ 2-31. A number of commenters request that the Commission reduce the 120-day public notice period afforded ITFS licensees and permittees under 47 C.F.R. § 21.902(i)(6), to file petitions to deny MDS applications for new and modified stations. Hardin and Marshall suggest the Commission adopt a rule requiring the use of frequency offset transmitters to reduce cochannel interference. These issues are also addressed in the *Second Order on Reconsideration*, at ¶¶ 32-53.

[28] *Supra* at n.5; Comments of Association at 20-25. *See, e.g.*, Comments of American Telecasting at 23; Reply Comments of CAI Wireless at 2; Hardin at 2-3; Cross Country; Humanities; Multi-Micro; University of Arizona; Region IV; University of Maryland.

partitioned area. *See infra* at ¶¶ 46-47. This will permit broad participation from entities of all sizes. This framework provides the most efficient system of disseminating MDS licenses because service areas are easily identified and authorizations are promptly granted with minimal administrative or judicial delays. This approach will also provide operators sufficient flexibility to design systems that satisfy consumer demand.

25. We emphasize that there is no perfect or simple filing approach to adopt at this time for new MDS authorizations given the history of the service, the characteristics of the technologies involved, the implementation of competitive bidding procedures, and our goal to rapidly enhance wireless cable systems as viable competitors in the multichannel video marketplace. We also reiterate that MDS is a heavily encumbered service. Although conditional licenses in some markets for one or more channels have been forfeited for failure to comply with express conditions or to timely construct, in a majority of the markets only small portions are unserved and few channels are available. Of the thirteen MDS channels, it is possible that no channel remains available for prospective bidders for as many as 59 of the cities of the top 100 ranked television markets. There are possibly two or less channels available in as many as 90 percent of these market cities. Moreover, the fixed 35-mile protected service areas of MDS incumbents, adopted today in a separate proceeding, will occupy substantial portions of most BTAs and typically cross BTA boundaries, especially in the eastern half of the country where BTAs are relatively geographically smaller. By enabling incumbents to continue providing interference-free service to subscribers within the expanded 35-mile areas, it is likely that in a substantial number of BTAs, it may be difficult, if not impossible, for an auction winner to locate a station anywhere in the BTA to provide both interference-free service and the necessary interference protection to protected areas of incumbents; unless either the auction winner is the incumbent, negotiates an interference agreement with the incumbent or would acquire the authorization of the incumbent.[29] We emphasize that prospective bidders must carefully ascertain the extent of incumbent operations and authorized but unconstructed facilities in any BTAs prior to bidding. Further, where there remains outstanding at the time of auction a pending application, petition for reconsideration, reinstatement request or application for review affecting any BTA, winning bidders would acquire any authorization conditioned upon the outcome of Commission actions on such applications or pleadings. Prospective bidders must consider the total impact of incumbents in their valuation of the auction areas for competitive bidding purposes.

26. With regard to the definition of the service area to be authorized for MDS, we conclude that issuing authorizations by Basic Trading Areas (BTA) reflects the best balance of competing considerations. We considered several service area options including

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[29] In assessing MDS channel availability, we assumed that each authorized or previously proposed MDS station has a protected service area of 35 miles, *i.e.*, the expanded service area adopted today in a related order. *Second Order on Reconsideration.*

Metropolitan Statistical Areas (MSA) and Rural Service Areas (RSA),[30] the television Areas of Dominant Influence (ADI) and the analytically similar Designated Market Areas (DMA),[31] Basic Trading Areas (BTA) and a combination of service areas that vary in size. The record reflects that because many MSAs are much smaller than actual service areas existing today, wireless cable stations licensed to different entities in adjacent MSAs would have great difficulty providing service to their MSA without causing harmful interference to systems in adjacent areas.[32] In some cases, operators who designed their systems to maximize population, are serving subscribers located beyond the MSA in which the transmission facilities are located.[33] Furthermore, the record indicates that the use of MSAs and RSAs would result in unnecessary fragmentation of natural markets and in order to protect the boundaries of adjacent MSAs and RSAs, in many cases, stations would have to operate at extremely low levels of power. While simultaneous multiple round bidding would permit the consolidation of interdependent MSAs and RSAs, and licensees could acquire additional markets after auctions through the assignment and transfer process, we believe that these options may result in unproductive regulatory and transaction costs for the Commission and applicants. We believe that the use of larger service areas would alleviate these problems and would reduce the need for and cost of interference coordination between neighboring licensees.

27. ADIs and DMAs, on the other hand, tend to be much larger than the area in which reliable MDS service is available using today's technology. American Telecasting indicates that ADIs tend to be over seven times the size of actual wireless cable protected service areas (of 710 square miles) and therefore concludes that ADIs are the least appropriate service area for MDS. It explains that ADIs are designed for television advertising measurement purposes and unlike wireless cable, the signal of television stations and hence the size of ADIs are attributed to cable carriage of television signals. Comments of American Telecasting at 18. Furthermore, the cost of acquiring an ADI authorization through competitive bidding, building systems and marketing services in the larger ADIs may unnecessarily restrict entry to a small number of applicants. BTAs offer a compromise in

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[30] MSAs and RSAs are used by the Commission in licensing cellular radio systems. All of the 306 MSAs and 428 RSAs and the counties they comprise are listed in *Public Notice*, Report No. CL-92-40, "Common Carrier Public Mobile Services Information, Cellular MSA/RSA Markets and Counties," 7 FCC Rcd 742 (1992). *See also* 47 C.F.R. § 22.909.

[31] DMAs are standard geographic areas developed by A.C. Neilsen Company in which each county in the continental United States is placed within one of the 211 DMAs, the lowest numbered DMA having the highest population.

[32] *See, e.g.*, Comments of American Telecasting at 18; Marshall at 2-3; Vega at 2-4; Association at 35-37; ACS Enterprises, *et al.* at 6-9.

[33] For example, the Association described an existing wireless cable operator in Ohio who currently serves subscribers in three different MSAs. Comments of Association at 37.

size that may best approximate MDS service areas. Although varying in geographic shape and size, BTAs are bigger than MSAs generally since they often include the MSA and surrounding counties, thus mitigating harmful interference among adjacent areas. BTAs offer sufficiently large service areas to allow applicants flexibility in designing a system to maximize population coverage and take advantage of economies of scale necessary to support a successful operation. Yet BTAs are generally smaller than ADIs, making the initial cost of acquiring the authorization through competitive bidding lower, and therefore providing greater opportunity for participation by small businesses, female and minority entrepreneurs and rural telephone companies. The use of BTAs combined with geographic partitioning will encourage further participation by a wide variety of applicants. *See* 47 U.S.C. § 307(j)(4(C). Finally, BTAs provide a manageable number of discrete filing areas for competitive bidding purposes.

28. We recognize that the majority of the commenting parties express support for the national filing window approach. We believe, however, that using national filing windows would most likely result in more of the very substantial processing and administrative delays that have long plagued the development of the wireless cable service. Given the history of the service, we believe such delays are inherent in site-specific licensing, which would require analysis of long-form applications containing the applicant's complete engineering proposal before the competitive bidding process begins. Since the national filing window approach would likely result in a larger number of mutually exclusive applications and daisy-chains, implementation would likely require significant Commission resources and a substantial amount of time to conduct the multi-part auctions (to resolve the daisy-chains) recommended by some commenters or otherwise complete the competitive bidding process. We acknowledge the concerns of some commenters that the licensing approach should afford MDS licensees flexibility to locate systems wherever necessary to maximize coverage. The record reflects that the success of the wireless cable industry thus far has been based upon negotiated agreements with neighboring system operators and strong partnerships with ITFS licensees. The filing system and procedures we adopt herein are expected to facilitate such negotiations and afford wireless cable operators the flexibility to improve existing systems, introduce new systems and implement digital technologies.

29. Indeed, the record indicates that geographic licensing may be the most efficient method to these ends in a digital environment, toward which the wireless cable industry is moving.[34] The nature of digital transmissions will allow more flexibility to tailor signal coverage to geographic boundaries using multiple transmitting facilities. We believe that our rules will facilitate the transition to digital transmissions. If modification of our rules become necessary, we will act promptly to ensure that our rules in no way impede the digital future.

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[34] *See* Comments of CAI Wireless at 5; Association at 3-4; Reply Comments of CAI Wireless at 11; Crowell & Moring at 8.

30. In response to the concern about the protected service areas for MDS (BTAs) and ITFS being different, we must emphasize that the two services have differing purposes and authorization procedures. One is intended primarily to provide educational and cultural development to students enrolled in accredited schools and the authorization is issued to the best qualified applicant, while the other is commercial in nature and is subject to competitive bidding. Furthermore, unlike MDS stations, the protection afforded to ITFS operators is based upon receive sites and protected service area is defined in 47 C.F.R. § 74.903. Pursuant to this rule, the protected service area associated with the leasing of excess channel capacity will also expand to a circle, 35 miles in radius, centered about the transmitter site of the ITFS station. We note, however, that in a recent proceeding we adopted a 35-mile protection distance for ITFS receivers, a protection distance that is compatible with many BTAs,[35] and with the 35-mile protected service area for MDS stations which are authorized or previously proposed that we have separately adopted today. *Second Order on Reconsideration.*

31. For the reasons stated above, we believe that licensing by geographic areas is the best approach for issuing MDS authorizations. We decide not to adopt the approach presented in the *Notice* limiting applications to predetermined sites identified by the Commission based upon the locations of already authorized E, F or H channels where there are usable channels. We agree with the commenters that this approach is inflexible. An approach in which the Commission identifies the specific site sacrifices the business judgment of the operators when they are in the best position to consider market forces. Further, where there is more than one site, the Commission would have to establish criteria for choosing among the available locations. In addition, where identified sites are unavailable to the highest bidders, the Commission would have to process modification applications, which would actually decrease overall processing efficiency and would delay service to the public.

32. We decline to adopt a preference for existing licensees and system operators because we believe that, rather than place restrictions on eligibility to participate based upon an applicant having access to a minimum number of channels, it is in the public interest to encourage participation from a wide variety of applicants. Indeed, a new entrant into the wireless cable industry may place a higher value on the spectrum than an incumbent licensee or system operator in a given area. While we recognize that in some areas, the existing licensee or operator may be in the best position to immediately introduce competition to wired cable, we further believe that a new entrant with sufficient resources will be able to accumulate a sufficient critical mass of channels to launch a system in a market through the competitive bidding process and through the assignment or transfer of previously authorized channels. Thus, market forces will lead to the accumulation of channels into one operating system.

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[35] *Report and Order* in MM Docket No. 93-24, 10 FCC Rcd 2907, 2917.

33. We also decline to adopt the proposals set forth by du Treil, Vega, ACS Enterprises, *et al.* and CAI Wireless. The allotment scheme proposed by du Treil is inappropriate for MDS at this point in time because it is a heavily encumbered service. In addition, adoption of an allotment proposal would restrict engineering design flexibility. The proposals by Vega and ACS Enterprises, *et al.* to adopt the national filing window with short-form applications do not alleviate the delays caused by the likely large number of mutually exclusive applications forming daisy-chains. The request by U.S. Wireless to eliminate the automatic forfeiture rule is beyond the scope of this proceeding. A number of additional proposals were set forth by other commenting parties to otherwise improve the MDS filing process or prevent the warehousing of MDS channels, assuming a filing window approach was utilized. Essentially, the proposals are unnecessary in light of the modifications to our rules adopted in this proceeding and in the *Second Order on Reconsideration*.

1. Service Areas

34. We therefore will award MDS authorizations for entire BTA service areas under competitive bidding procedures. BTAs were designed by Rand McNally to represent the natural flow of commerce, comprising areas within which consumers have a community of interest. Like the other types of predetermined geographical areas, BTAs vary in size and shape. Typically, a BTA includes a population center(s) (city or large town) and the surrounding rural area. BTA boundaries are based on county lines because most statistical information relevant to marketing is published in terms of counties. The specific boundaries were drawn after a study of several factors, such as physiography, population distribution, economic activities, newspaper distribution and transportation facilities.[36]

35. We note that Rand McNally & Company is the copyright owner of the Basic Trading Area and Major Trading Area Listings, which list the counties contained in each BTA, as embodied in Rand McNally's Trading Area System Diskette and geographically represented in the map contained in Rand McNally's *Commercial Atlas & Marketing Guide*. Rand McNally has licensed the use of its copyrighted MTA/BTA listings and maps for certain services such as Personal Communications Services (PCS), 800 MHz Specialized Mobile Radio Services (SMR) and Local Multipoint Distribution Services (LMDS). Rand McNally had also reached an agreement in principle with the American Mobile Telecommunications Association (AMTA) for a blanket copyright license for the conditional use of the copyrighted material in the 900 MHz SMR service. These agreements authorize the conditional use of Rand McNally's copyrighted material in connection with these particular services, require interested persons using the material to include a legend on reproductions (as specified in the license agreement) indicating Rand McNally's ownership, and provide for a payment of a license fee to Rand McNally.

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[36] *See* Rand McNally *1992 Commercial Atlas & Marketing Guide* at 39.

36. Currently, MDS is not covered by any blanket copyright license agreement. While current and prospective MDS licensees and other parties interested in using the copyrighted materials may negotiate their own licensing arrangement with Rand McNally, as in other services, we encourage interested parties and Rand McNally to explore the possibility of entering into blanket license agreements similar to those noted above to cover MDS. In any event, we note further that an MDS BTA authorization grantee who does not obtain a copyright license (either through a blanket license agreement or some other arrangement) from Rand McNally for use of the copyrighted material may not rely on grant of a BTA-based authorization from the Commission as a defense to any claim of copyright infringement brought by Rand McNally against such grantee. The MTA/BTA Listings, the MTA/BTA Map and the license agreements noted above are available for public inspection at the MDS public reference room, Room 207, 2033 M Street, N.W, Washington, D.C.

37. The Commission will consider awarding the 487 BTA authorizations in the United States, with the following additions to be authorized as BTA-like areas: American Samoa, Guam, Northern Mariana Islands, San Juan, Puerto Rico, Mayaguez/Aguadilla-Ponce, Puerto Rico, and the United States Virgin Islands. Thus, a total of 493 authorizations will encompass all land areas within the United States and related territory. We reiterate that, based on its geographic size, and the extent of encumbrances, it may not be possible in a particular BTA to design and select a station site for any MDS station without negotiating an agreement with one or more affected previously authorized or proposed, cochannel or adjacent channel MDS or ITFS stations. However, we are going to hold auctions initially for all BTAs for which mutually exclusive, short-form applications are filed. The Commission will announce the time and place of the auction and the applicable bidding procedures by a future public notice. Applicants wishing to participate in the auction process will file a short-form application indicating each BTA service area for which they desire to bid. To determine eligibility to apply for a BTA service area, we will apply the same general eligibility requirements for an MDS authorization.[37] There is no restriction on the number of BTA service areas for which any entity may apply or on the number of BTA authorizations awarded to one entity. Incumbent MDS licensees, conditional licensees and applicants and new entrants will be eligible. Accordingly, prospective bidders will be able to aggregate adjacent BTAs to utilize economies of scale that currently benefit wired cable competitors. Selection from among the mutually exclusive applicants will be determined through a simultaneous multiple round bidding process. The auction winner for each BTA service area, if qualified, will be awarded a BTA authorization. The protected service area lies within the geographic boundary of that BTA, except as excluded by any 35-mile circle protected service areas of previously authorized or proposed MDS stations and except for channels related to ITFS lease agreements.

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[37] *See* 47 C.F.R. §§ 21.4, 21.17, 21.900, 21.912. Because we are amending our rules to implement competitive bidding, our rules regarding random selection and comparative consideration would not apply to applications for new stations filed after the lifting of the freeze. *See* 47 C.F.R. §§ 21.31, 21.914.

2. Rights and Responsibilities of BTA Authorization Holder

38. The following paragraphs describe the service rules regarding the rights and responsibilities of the holder of a BTA authorization, the duration of those rights and how an event will alter the boundaries of a protected MDS service area. For purposes of clarity, the chronology of the events would occur as follows: (1) the 35-mile protected service areas of incumbents will become fixed in place upon the effective date of the *Second Order on Reconsideration*; (2) issuance of public notices announcing auctions by geographic area, and specifying the filing periods for short-form applications and upfront payments; (3) issuance of a public notice identifying all applicants determined to be qualified to bid (*i.e.*, submitted acceptable short-form applications and sufficient upfront payments); (4) competitive bidding rounds; (5) after bidding has ended, the Commission would declare bidding closed and would notify the auction winners, who would then have five business days to make down payments and thirty business days to file at least one long-form application;[38] (6) following review of the long-form applications, the Commission would issue a public notice identifying those accepted and opening a thirty-day period for filing petitions to deny; and (7) if no petitions to deny are filed or if they are dismissed or denied, the Commission would issue a public notice stating that the BTA authorization and the MDS station license are ready to be issued. Assuming that the auction winner made full payment of its winning bid within five business days of this public notice, the Commission would grant one or more conditional station licenses for individual stations within the auction winner's BTA service area and issue the BTA authorization for the entire BTA service area.

a. Description of Authorization

39. The holder of a BTA authorization may file one or more long-form applications seeking authority to construct stations anywhere inside their BTA on usable MDS channels, provided the specific engineering design meets the Commission's interference protection standards to all authorized or previously proposed MDS and ITFS facilities, and complies with the prescribed signal strength limits at the BTA boundary, *i.e.*, at all points along the perimeter of the BTA. A separate conditional station license will be awarded for each single channel or channel group at each site location.[39] For example, separate licenses will be

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[38] If the BTA is so heavily encumbered that the winning bidder is unable to file a long-form application for a station within the BTA while protecting incumbents from harmful interference, the winning bidder must file a statement of intention of use of the BTA, accompanied by a current License Qualification Report (FCC Form 430), before the Commission issues the BTA authorization. *See infra* at ¶¶ 152-154.

[39] This in no way should be interpreted to reflect on other services where we are eliminating site licensing. *See Further Notice of Proposed Rule Making* in PR Docket No. 93-144 and PP Docket No. 93-253, FCC 94-271 (released Nov. 4, 1994), 59 Fed. Reg.

issued for the E Group, F Group and each of the three H Channels. In this *Report and Order*, the initial license for the BTA service area will be referred to as a "BTA authorization" and individual channels will be separately licensed. Thus, we will distinguish between three different types of authorizations for MDS facilities: (1) a "BTA authorization" awarded to an auction winner of a particular BTA following the requisite long-form application or statement of intention and requisite payment, (2) a "station license for each individual station within the BTA" service area held by an auction winner, and (3) a "station license" for an MDS facility authorized or previously proposed under the rules predating the effective date of this *Report and Order*. Accordingly, under the Commission's rules, as amended herein, the holder of a BTA authorization would file a long-form application for each usable single channel or channel group at each transmitter site within the auction winner's BTA service area, and will have a later opportunity to file amendments to correct any defects in the application. The construction period specified in each conditional station license granted for the individual stations within the auction winner's BTA service area will be the five year build-out date which runs from the grant date of the first conditional license within the auction winner's BTA (granted the same date as the BTA authorization). When the portion of the system represented by a particular long-form application is constructed and ready to begin operation, the holder of the BTA authorization will file a corresponding certification of completion of construction. The license term for those stations will be the same ten-year term as MDS stations licensed prior to the adoption of this *Report and Order*. *See* 47 C.F.R. § 21.45. The ten-year term for the new licenses will commence on the date the Commission declares bidding in the MDS auction to be closed. The holder of a BTA authorization has a protected service area that is coterminous with the boundaries of their BTA service area, subject to exclusion of the protected service areas and/or locations of authorized or previously proposed MDS and ITFS facilities, as further discussed *infra* in ¶ 54. Individual station licenses that are a part of a BTA service area will not have a uniquely associated protected service area. The common protected service area of all individual stations within the BTA authorization will be the boundary of that BTA.

40. We emphasize that the actual service areas can be tailored through voluntary agreements among the affected parties. Although our rules indicate that the holders of BTA authorizations must locate all transmitter sites within the boundaries of the BTA and may not cause interference in adjacent BTAs, the interference rights may be modified through negotiation and written agreement. The MDS station facilities within the auction winner's BTA may be expanded or modified throughout the BTA service area so long as the system continues to be in compliance with our technical rules and protects incumbent MDS and ITFS facilities. The facilities may be expanded beyond the BTA or into the protected service area of an incumbent with an agreement from the entity that controls the adjacent BTA or the incumbent protected 35-mile circular area.

60,111 (Nov. 22, 1994); *Second Report and Order and Second Further Notice of Proposed Rulemaking* in PR Docket No. 89-553, PP Docket No. 93-253, and GN Docket No. 93-252, FCC 95-159 (released April 17, 1995), 60 Fed. Reg. 21,987 (May 4, 1995).

41. Consistent with our goal of establishing filing procedures and policies that will encourage the accumulation of a full complement of channels necessary for a viable MDS system, only the BTA authorization holder will be qualified to submit any new application for MDS use of available ITFS frequencies within the BTA in accordance with 47 C.F.R. § 74.990(a), and the ITFS application procedures of § 74.991. ITFS station licensees and prospective ITFS applicants that seek to construct and operate new ITFS facilities located within a BTA and that choose to lease excess channel capacity will be free to negotiate with any potential lessee, including the holder of the BTA. In furtherance of our goal of accumulating a full complement of channels, however, the holder of the BTA will be afforded the right to match the final offer of any proposed lessee. Should the holder of the BTA decline to exercise such right, then the ITFS applicant can enter into a lease arrangement with any operator it so chooses. This is not intended to interfere with present contractual rights that are in effect or renewal of those rights. In the case where a BTA authorization holder is the licensee of ITFS channels, the associated protected service area will be the entire BTA, and interference protection will be governed in the manner for protecting BTA service on MDS channels. However, in the case where a BTA authorization holder leases excess channel capacity from an ITFS licensee, the protected area will be a 35-mile circle centered around the particular ITFS station in the BTA that leases the channels. We will afford this area the same protection generally afforded under our ITFS rules. BTA authorization holders in adjacent BTAs must protect points on the 35-mile circle using cochannel and adjacent channel desired-to-undesired signal strength ratios of 45 dB and 0 dB, respectively. A special case will occur whenever BTA authorization holders in adjacent BTAs both lease the same ITFS channel group, such that the 35-mile protected circle of each extends into the BTA of the other. In this regard, we will expect the respective ITFS entities and BTA holders to reach an agreement concerning interference protection near their common boundary. Moreover, a BTA authorization holder will not be required to protect that portion of the 35-mile circle associated with the other authorization holder that falls on his or her side of the boundary. We believe that this approach will promote our policy objectives for this service and will similarly have only a positive effect on the continued successful development of ITFS with the ever expanding financial support for that service provided by wireless cable operators.

42. The available MDS spectrum within a BTA authorization will increase if the unconstructed facilities or unused channels held by an MDS incumbent with transmitter site locations within a particular BTA are forfeited or if previously proposed conditional licenses or modifications are not granted. The holders of the BTA authorizations obtain contingent rights to this spectrum when they receive their authorizations, so that the forfeited channels will revert and become part of the BTA authorization up to the boundary of the BTA. The holder of the BTA authorization may subsequently file long-form applications for the forfeited channels, provided the specific station design meets the Commission's interference protection standards. Such a policy provides an incentive for the holders of BTA authorizations to find and document such warehousing violations, resulting in efficient use of fallow spectrum. In addition, authorization rights may be revoked or terminated because of gross misconduct, misrepresentation or bad faith by an applicant. Other events may also

change the protected service area, such as the end of the five year build-out period, an assignment or transfer or partitioning of the BTA. These events are discussed in detail below.

b. Five Year Build-out Period

43. The build-out period in which the holder of a BTA authorization is permitted to expand service or initiate new service within their BTA service area will be five years. Specifically, we will provide the BTA authorization holder five years from the grant date of the initial BTA authorization to construct and operate the system. The purpose of this requirement is to ensure that service is promptly delivered to the public. *See* 47 U.S.C. § 309(j)(4)(B). This five year build-out period is not extended by the grant of subsequent authorizations, such as the grant of a long-form or modification application for an individual station within the BTA service area. We will require the holder of a BTA authorization to submit a showing to the Commission five years after the BTA authorization was issued demonstrating that it is providing a signal level sufficient to provide adequate service to approximately two-thirds of the population of the area within its control in the licensed BTA. The holder of the BTA authorization must submit maps and other supporting documents showing compliance with this construction requirement. The Commission, in evaluating the showing, may consider line-of-sight obstructions and the ability to provide service without causing harmful interference to other MDS or ITFS facilities. If the holder of the BTA fails to cover any of the BTA, it will forfeit the authorization and it will be ineligible to regain it. If the Commission determines that there are usable channels in an unserved or underserved area of the BTA, the Commission would partition the area along geopolitical boundaries and issue a public notice establishing the reauction of the partitioned area. This public notice would announce the auction or auctions by geographic area, specifying the filing period for short-form applications and the applicable bidding procedures. The holder of the BTA will forfeit the partitioned service area and will be ineligible to bid on it. We believe that this coverage policy is reasonable and will result in the channels being made available to applicants who will provide service to the public. We further believe that this will deter the warehousing of channels and ensure that the spectrum is being effectively utilized for MDS.

c. Assignment or Transfer of Control

44. The holders of BTA authorizations and MDS incumbents may negotiate mergers, buyouts, channel swaps, channel splits or make similar arrangements on a voluntary basis, pursuant to the general assignment and transfer provisions of 47 C.F.R. § 21.38. Both parties are generally permitted to buy from and sell authorizations to each other and to third parties, with few limitations.

45. Additional spectrum may be acquired by the holder of a BTA authorization through buyouts of incumbent licensees within their authorized BTA service area. As is the case with ITFS licensees, wireless cable operators may also acquire spectrum through leasing agreements with incumbents. In this case, the protected service area of the acquired station